



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

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Eric J. Holcomb
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2017 Annual Reports

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The Following Reports Have No Activity

Water Body Designation as an Outstanding State Resource:	IC 13-18-3-2
Outstanding State Resource Water Improvement Fund Report:	IC 13-18-3-14

Permit Process Report IC 13-15-12

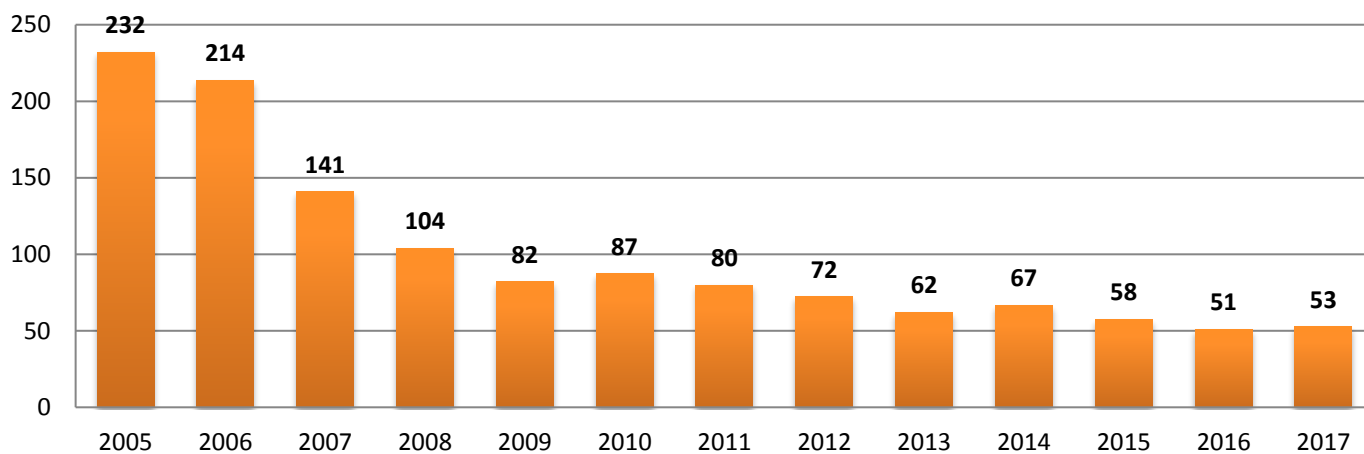
Permit Efficiency:

Total calendar days accumulated in issuing environmental permits, as determined by state statute

Green is at or below 85% Yellow is above 85% and below 95%

	Current	85%	95%	Statutory
Land	26,066	37,328	41,719	43,915
Air	43,122	64,252	71,811	75,591
Water	36,215	68,366	76,409	80,430
Totals	105,403	145,810	189,939	199,936

Permits - Percent of Statutory Days



IDEM Back Logs Eliminated

- On January 10, 2005, there were 263 administratively extended NPDES permits and 289 unissued Title V permits. All of those have been issued and IDEM now issues permits using less than 60% of the statutorily allowed days.
- On January 10, 2005, there were 250 unresolved enforcement cases over 2 years old. Now, nearly all cases are resolved less than a year.

Permit Process Report IC 13-15-12

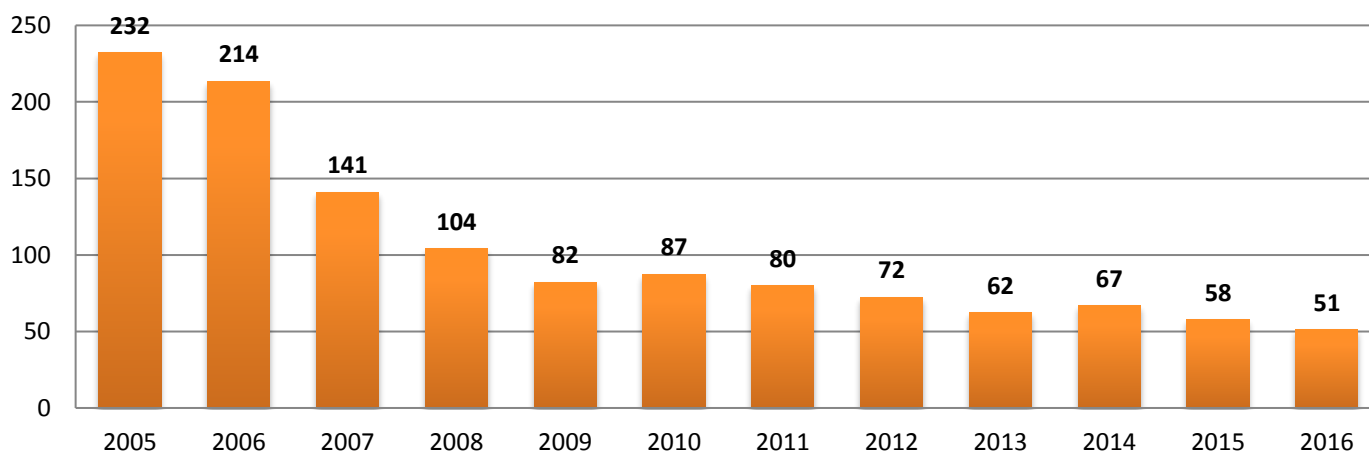
Permit Efficiency:

Total calendar days accumulated in issuing environmental permits, as determined by state statute

Green is at or below 85% Yellow is above 85% and below 95%

	Current	85%	95%	Statutory
Land	27,954	31,782	35,521	37,390
Air	28,136	47,269	52,830	55,611
Water	35,754	66,759	74,613	78,540
Totals	91,844	145,810	162,964	171,541

Permits - Percent of Statutory Days



IDEM Back Logs Eliminated

- On January 10, 2005, there were 263 administratively extended NPDES permits and 289 unissued Title V permits. All of those have been issued and IDEM now issues permits using less than 70% of the statutorily allowed days.
- On January 10, 2005, there were 250 unresolved enforcement cases over 2 years old. Now, there is only 1 case that is over 2 years old.

ADMINISTRATIVELY EXTENDED NPDES PERMITS
IC 13-15-4-19

NPDES Permit Renewals	
Number of Pending NPDES Renewals Submitted On-Time	3
Number of Pending NPDES Renewals Submitted Late (< 180 days prior to expiration date)	0
Number of Pending General NPDES Renewals Submitted Late (< 90 days prior to expiration date)	0
Total Number of Pending NPDES Renewals as of 7/1/2017	3

* Additional Notes	
Of the pending NPDES permit renewal(s), number which have already been public noticed.	3
EPA-defined Permit Backlog (only counts a permit as backlogged if it is still pending > 180 days past the Expiration Date)	3
<p>As of July 21, 2017, these 3 backlogged permits have been issued bringing the NPDES permit backlog back to -0-.</p> <p>These 3 permits expired on 11/30/2016, but were administratively extended due to the fact that the permit renewal applications were submitted in a timely manner. Therefore, the permits were backlogged for 7.5 months (if you apply the EPA definition, then these permits were only backlogged 1.5 months).</p> <p>There was no time extension of these permits under IC 13-15-4-8.</p> <p>The 3 permits are considered Major Industrial.</p> <p>All 3 permits were public noticed on 4/12/2017 and the public notice period ended 5/29/17 Note: IDEM gave a 45 day notice rather than the minimum 30 to allow fair review by interested parties since there were 3 permits.</p> <p>All 3 permits are complex steel mill permits that expired at the same time. During this period of time, OWQ Permits Branch experienced staff turnover that limited the number of permit writers that were able to work on these permits and the one permit writer that was assigned to these permits experienced a serious medical condition that enabled prevented him from continuing to work on the permits and they had to be re-assigned. All 3 permits were also formally reviewed by U.S. EPA Region 5, which added additional time to the issuance. In addition, the permittees came to IDEM with new information during the public notice period that required additional changes to the permits and another review of the changes by U.S. EPA Region 5.</p>	

New NPDES Permits	
Number of Pending New NPDES applications exceeding the statutory timeframes of IC 13-15-4-1	0

ENFORCEABLE OPERATING AGREEMENT PROGRAM REPORT **IC 13-17-13-3**

The Indiana Department of Environmental Management (IDEM) has a Source Specific Operating Agreement (SSOA) program (pursuant to 326 IAC 2-9) under which specific types of activities may operate, provided that the source accepts the pre-established terms of the SSOA "as is." Although a source may not simultaneously operate under more than one of the same type of SSOA, sources can operate under up to 4 different SSOAs, as long as the total potential to emit for any regulated pollutant, as limited by the SSOAs, does not exceed major source levels.

In all, there are 23 separate SSOAs available to applicants, covering 13 specific types of activities. For those SSOAs that limit the total potential to emit for any regulated pollutant to less than twenty-five (25) tons per year, a public comment period is not required (for a list of these SSOAs, see 326 IAC 2-1.1-3(d)). However, pursuant to 326 IAC 2-5.1-3(a)(1)(E), for those SSOAs that have a limited potential to emit for any regulated pollutant of twenty-five (25) tons per year or more, a New Source Review (NSR) Permit for approval to construct and a thirty (30) day public comment period is required. The final issuance of any SSOA is appealable. With the exception of coal mining and some stone crushing SSOAs, there is no annual fee required, but sources are required to file an annual Compliance Notification. Sources are not required to renew their SSOA.

Pursuant to 326 IAC 2-9-1(i), a SSOA does not relieve the permittee of the responsibility to comply with the provisions of any other applicable federal, state, or local rules, or any New Source Performance Standards (NSPS), 40 CFR Part 60, or National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61 or 40 CFR Part 63.

As of June 30, 2017, there are 783 currently permitted SSOA sources. To date in FY17 (July 1, 2016 – June 30, 2017), there were SSOAs issued to 20 sources.

LEGISLATIVE REPORT ON CFO/CAFO ACTIVITIES FY 2017 **Senate Resolution 2512-2007**

The Indiana Department of Environmental Management's (IDEM) Office of Land Quality administers the animal feeding operation regulatory program in Indiana. This program includes permitting, compliance monitoring and enforcement activities for 1,019 Confined Feeding Operations (CFOs) and 796 Concentrated Animal Feeding Operations (CAFOs) for a total of 1,815 operations subject to permitting and inspection. In accordance with Senate Resolution 2512, the below information is provided by the Indiana Department of Environmental Management for the time period July 1, 2016 through June 30, 2017.

Permit Type	Reason for Inspection	Number of Inspections
CFO	Paperwork Certificate of Completion (CoC) Follow-Up	12
	Compliance Assistance	8
	Construction	38
	Complaint Inspection	7
	Follow-Up Inspection	26
	Routine Inspection	179
	Spill Response Inspection	1
	Voidance	15
	Other (permit, enforcement, site status...)	11
	Total	297
CAFO	Paperwork (CoC) Follow-Up	8
	Compliance Assistance	16
	Construction	188
	Complaint Inspection	20
	Follow-Up Inspection	15
	Routine Inspection	144
	Spill Response Inspection	4
	Voidance	9
	Other (permit, enforcement, site status...)	2
	Total	406
CFO/CAFO Totals	Paperwork (CoC) Follow-Up	20
	Compliance Assistance	24
	Construction	226
	Complaint Inspection	27
	Follow-Up Inspection	41
	Routine Inspection	323
	Spill Response Inspection	5
	Voidance	24
	Other (permit, enforcement, site status...)	13
	Total	703

CFO and CAFO Violations Cited from July 1, 2016 to June 30, 2017

Permit Type	Citation/Violation	Number of Violations
CFO	Approval and Performance Standards	5
	Discharge and Spill Requirements	1
	Land Application Records	49
	Operating Records	41
	Operational Standards	28
	Land Application	7
	Total	131
CAFO	Approval and Performance Standards	5
	Discharge and Spill Requirements	5
	Land Application Records	18
	Operating Records	14
	Operational Standards	17
	Land Application	5
	Total	64
CFO/CAFO Totals	Approval and Performance Standards	10
	Discharge and Spill Requirements	6
	Land Application Records	67
	Operating Records	55
	Operational Standards	45
	Land Application	12
	Total	195

Permitting Activities: CFO and CAFO Application Details from July 1, 2016 to June 30, 2017

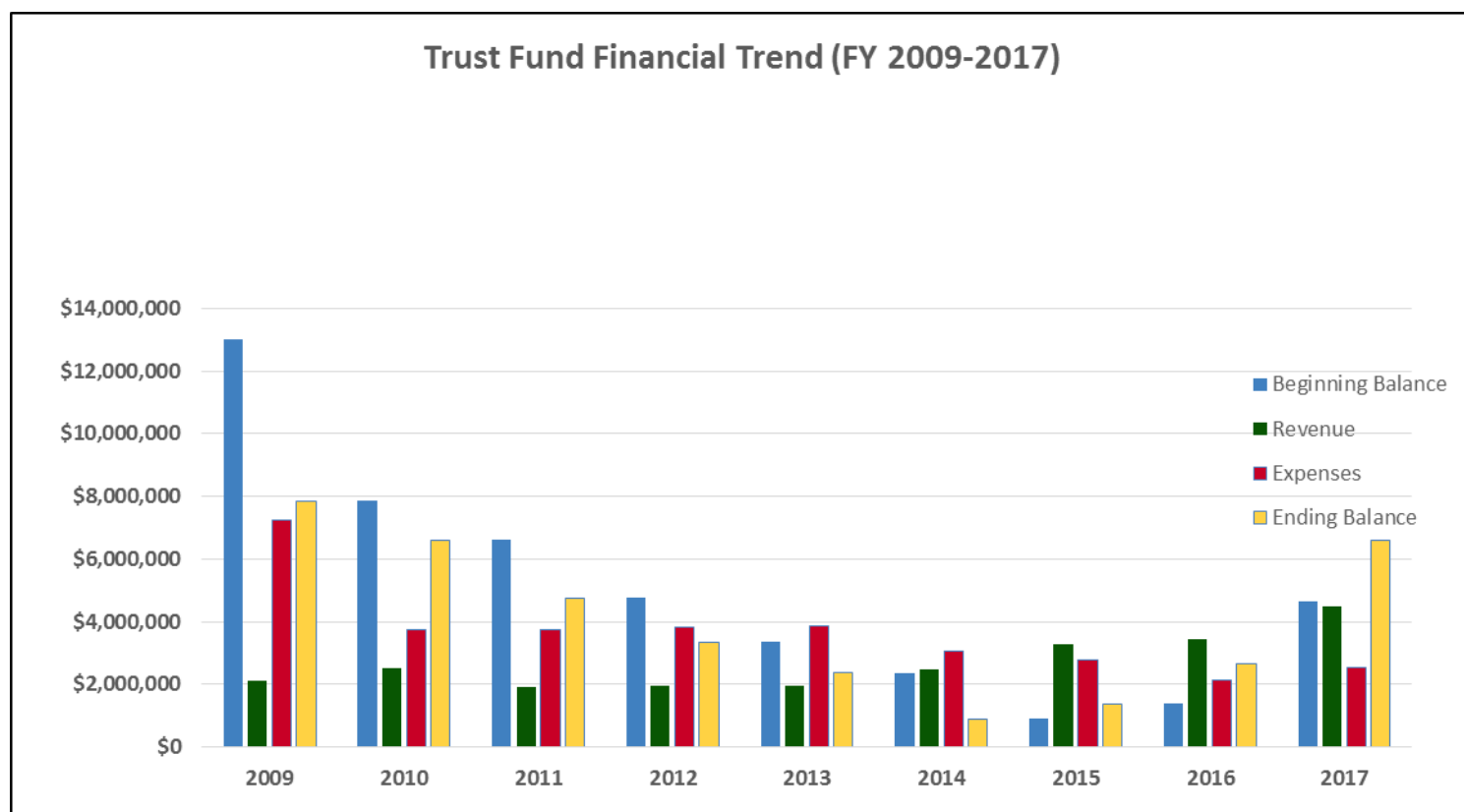
Application Type	Received	Issued	Denied	Withdrawn
CFO Approval Applications	110	109	0	1
Individual NPDES CAFO Permit Construction Applications	0	0	0	0
<i>Large CAFOs</i>	0	0	0	0
<i>Med. CAFOs</i>	0	0	0	0
<i>Small CAFOs</i>	0	0	0	0
Total Construction Applications	110	109	0	1
Individual NPDES CAFO Permit Coverage Application	0	0	0	0
<i>Large CAFOs</i>	0	0	0	0
<i>Med. CAFOs</i>	0	0	0	0
<i>Small CAFOs</i>	0	0	0	0
Individual NPDES CAFO Permit Renewal Application	0	0	0	0
<i>Large CAFOs</i>	0	0	0	0
<i>Med. CAFOs</i>	0	0	0	0
<i>Small CAFOs</i>	0	0	0	0
Total Other NPDES Permit Applications	0	0	0	0
All Application Totals	110	109	0	1

Hazardous Substance Response Trust Fund Report **IC 13-25-4-25**

In FY 2017, the Hazardous Substance Response Trust Fund (Trust Fund) saw revenue exceed expenses for a third year in a row. The beginning balance of the Trust Fund for FY 2017 was \$4,661,011. The total revenue from cost recovery, enforcement penalties and hazardous waste disposal tax was \$4,482,682. Total expenses for FY 2017 were \$2,534,306. This left a year-end asset balance of \$6,609,387.

Expenses for FY 2017 were slightly higher than for 2016. However, the revenue total for FY 2017 was \$1,046,244 higher than for 2016. It is expected that the revenue for FY 2018 will be similar to FY 2016 levels. It is not expected that the revenue total will remain as high as experienced in FY 2017. Expenses are forecasted to increase for FY 2018 due to the funding of staff costs to oversee investigation and remediation of the 0153 Ground Water Contamination Site in Indianapolis, Indiana. It is anticipated that no net increase will be realized to the Trust Fund balance at the end of FY 2018.

The following graph depicts the recent financial trend for the Hazardous Substance Trust Fund:



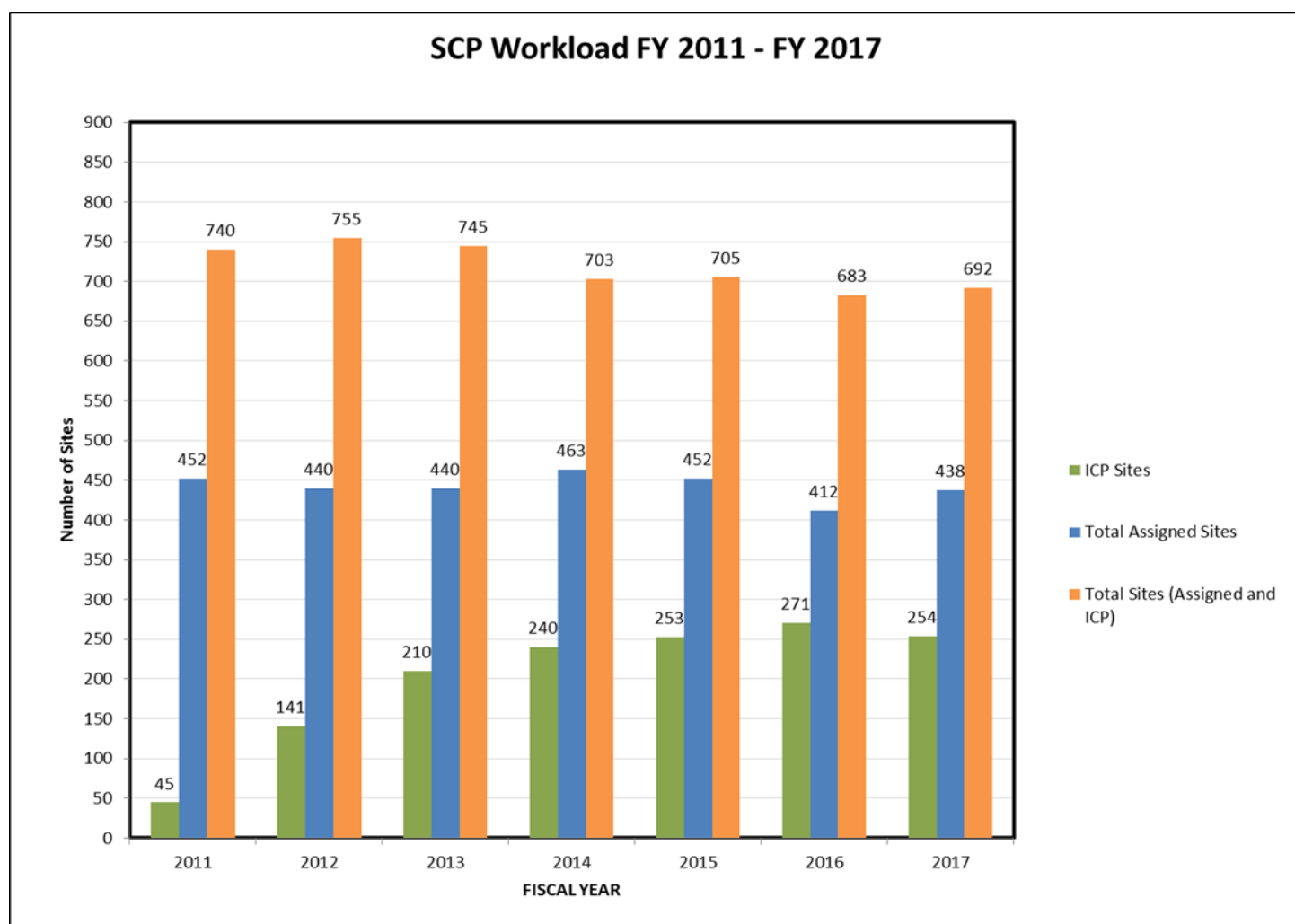
The expenses for the Trust Fund include the State Cleanup Program (SCP), Federal grant matching money for cleanup of sites listed on the National Priorities List (NPL or Superfund), and long-term operation and maintenance of sites completing the Superfund process.

The SCP is an enforcement program in the Remediation Branch of the Office of Land Quality. Administrative costs to operate the SCP are paid out of the Trust Fund and is the largest administrative expense to the Trust Fund. The role of the SCP is to manage the remediation and closure of hazardous substances and petroleum contaminated sites not eligible to be managed by the Federal Superfund Program or by the IDEM Leaking Underground Storage Tank or Excess Liability Trust Fund Sections. Common examples of SCP sites include current and former dry cleaners, current and former manufacturing facilities, petroleum pipelines, refineries, and petroleum bulk storage facilities. The sites within the SCP range from less

than a quarter acre of contaminated area to ground water impacted areas well over a mile in length. Typical contaminant exposure risks associated with sites in SCP are contaminated residential and municipal wells, contaminated indoor air of residential homes or contaminated surface waters and waterway sediments.

The SCP is partially financially self-sustaining through the ability to recover operating costs from parties responsible for conducting a contaminant cleanup. SCP operating and management costs are recovered and placed back into the Trust Fund and included as a revenue stream for the Trust Fund. In FY2017, \$1,116,022 was recovered from responsible parties by SCP through June 30, 2017.

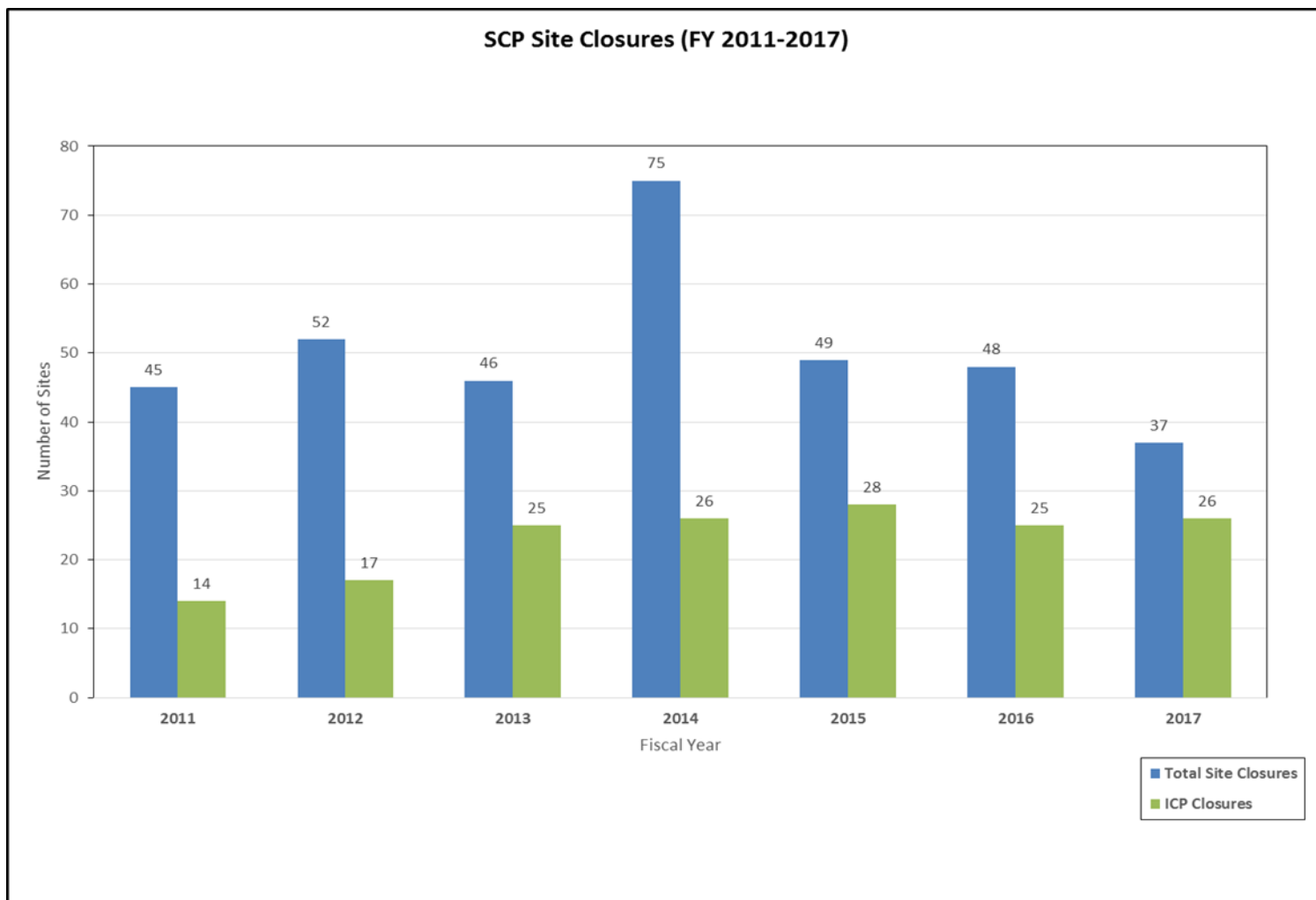
The bar graph below depicts the total number of hazardous substance and petroleum contaminated sites historically and currently being managed by the State Cleanup Program under the Trust Fund.



From FY 2011 to FY 2017, SCP has seen a stable trend in the total number of sites requiring remediation oversight. The total number of sites in the SCP as of FY 2017 was 692. As of the close of FY 2017, the SCP had 438 high and medium priority sites hazardous substance contaminated sites assigned to 13 SCP project managers. The total number of sites in the Independent Closure Process (ICP) remained steady in FY 2017 with a total of 254. During FY 2012, SCP began full utilization of a self-implementing closure process known as the ICP to address the large number of low and medium priority petroleum sites that could not be assigned to project management staff due to staffing shortages and the increase in high priority sites. The ICP has created a structured independent process for low priority sites to close with no direct management

oversight, only quality assurance auditing, by the SCP. This has allowed the SCP to more effectively and efficiently manage its high priority work load and concentrate its daily efforts on high priority sites contaminated by hazardous substances.

During FY 2017, the SCP completed closure of 37 sites while receiving a total of 137 new sites. The SCP has overseen the closure of 988 sites during the history of the program. The following graph depicts the site closure trend since FY 2011:



Waste Tire Annual Report
IC 13-20-13-10

The Waste Tire Management Fund

Indiana Code (IC) 13-20-13-8 establishes the Waste Tire Management Fund (WTMF) to support Indiana's Waste Tire Management Program. The WTMF includes the remediation and removal of improperly disposed waste tires, promotion of the utilization of processed tire products, and the provision of financial assistance to reduce waste tire generation. Management of the WTMF was transferred from the Office of Lieutenant Governor to IDEM on July 1, 2007. Table 1 represents the revenue and expenditures administered through the fund for Fiscal Years 2008 through 2016.

Table 1: Revenue and Expenditures

Fiscal Year	Fee Reven	IDEM Grants	IDEM Cleanups
2008*	\$1,596,240	\$292,644	\$0
2009*	\$1,623,795	\$1,000,000	\$592,705
2010*	\$2,299,645	\$0	\$0
2011*	\$1,380,044	\$0	\$0
2012*	\$1,325,612	\$0	\$779,873
2013*	\$1,362,464	\$210,679	\$0
2014*	\$1,568,844	\$0	\$0
2015	\$1,571,211	\$0	\$0
2016	\$1,632,663	\$0	\$0

** July 1 of the specified year through June 30 of the next year.*

Suspension of Waste Tire Management Grant Program

The Indiana Department of Environmental Management (IDEM) has temporarily suspended the grant program. Due to the suspension of the grant program, no projects were funded and no money was expended for FY 2015. Estimates of money required to meet grant requests or recommended changes to the program will not be provided through this annual report until the grant program is reestablished. This report will only review the WTMF as related to the management of waste tires through this program.

The Waste Tire Management Program

The Office of Land Quality (OLQ) is responsible for regulating waste tire management activities. Indiana Administrative Code (IAC) 329 15 provides the framework for the 60 transporters, 15 processors, and 5 storage facilities that maintain waste tire registrations.

More than 8 million passenger tire equivalents (PTEs) were received by waste tire processors. Figure 1 shows how waste tires were utilized from January to December of 2016.

Figure 1: Waste tire utilization for Calendar Year 2016.

WASTE TIRE UTILIZATION	TONS
Landfill (Solid Waste)	1,226.57
Landfill (Alternate Daily Cover)	23,052.91
Tire Derived Fuel	35,118.79
Legitimate Use - Civil Engineering	1,213.03
Legitimate Use - Other	26,681.00
Other	4,352.38

The following sections detail the registration program that is supported by the WTMF:

Waste Tire Transporters

Waste tire transporters hauling waste tires in Indiana pay a \$25 application fee for their initial 5-year registration, after which they can renew for free. There is an annual \$25 operating fee. Transporters must also maintain a financial assurance mechanism of at least \$10,000. Transporters must annually report the number of waste tires hauled. A list of currently registered transporters with IDEM may be found online at:

http://www.in.gov/idem/wastetire/files/wt_transporters.pdf.

Waste Tire Processors Facilities

The application and renewal fee for a 5-year waste tire processing registration is \$200. There are no annual operating fees for waste tire processing facilities. They must annually report the number of tires processed and how the waste tires are utilized. If a processor accumulates more than 1,000 tires, they must also register as a storage site.

Waste Tire Storage Facilities

Waste tire storage is limited to 1,000 tires outdoors or 2,000 tires indoors without needing a permit. Waste tire storage sites must register if they plan on storing waste tires above those limits. The application fee for the initial registration is \$500, but there is no renewal fee. Waste tire storage facilities also pay a \$500 annual operating fee, and they must establish financial assurance. The financial assurance is based on third-party cleanup costs for the volume of material stored on the site. There are no renewal fees for storage sites.

A list of waste tire processors and storage facilities currently registered is available at:

http://www.in.gov/idem/wastetire/files/wt_processors_and_storage.pdf.

Registration applications, annual reporting forms, and manifest forms for transporters, processors, and storage facilities are available at: <http://www.in.gov/idem/wastetire/2336.htm>.

Compliance and Enforcement

Enforcement actions are initiated by OLQ to correct violations, assure facility compliance, and facilitate clean-up of tire dumps that represent a threat to human health and the environment. There were 6 new cases opened by IDEM's enforcement staff regarding waste tire violations in FY 2015. The new cases were 5 open dumps and 1 registered transporter/processor/storage site with violations.

Major sources of waste tires are subject to OLQ compliance inspections for proper waste tire management practices. These include vehicle maintenance facilities, transportation companies, new and used tire dealers, tire retreading plants, and auto salvage operations.

Although waste tire generators or sources are not required to register with OLQ, IC 13-20-14 has waste tire management requirements for specific operations.

New tire retailers are required to accept the same number of waste tires that are replaced by new tires purchased by the consumer. A handling charge is collected by the dealer for this service, in addition to a \$0.25/tire new tire fee. All sources of waste tires are responsible for delivery of their tires to an approved processing facility. This service is provided by registered waste tire transporters. All major sources of waste tires are required to maintain records of waste tire manifests that document proper waste tire management.

Indiana Household Hazardous Waste Grant Program Annual Report **IC 13-20-20-12**

Introduction

The Indiana Department of Environmental Management (IDEM), Office of Program Support provided grant funding and technical assistance to Indiana local units of government for the development and operation of household hazardous waste (HHW) and conditionally exempt small quantity generator waste (CESQG) collection programs. From 1994 to 2008, IDEM provided 175 HHW grants and 5.8 million dollars in support to communities and solid waste management districts. This funding helped start and expand HHW programs or activities, provide safe management of household hazardous products, and educate residents about preferred disposal options for HHW.

Suspension of HHW Grant Program

The Indiana Department of Environmental Management, in December of 2008, suspended state-funded grant programs for local government recycling projects, including the Household Hazardous Waste Grant Program. Due to the suspension of the grant program, no local government projects have been funded since 2011, and no money has been expended through the grant program. Until the grant program is re-instated, no estimate of money required to meet grant requests or recommended changes to the program will be provided through this annual report. IDEM continues to provide technical assistance to Indiana residents, local government and businesses on HHW and CESQG collection and management issues, including household pharmaceutical and sharps waste management. We are receiving more and more calls from citizens stating that they cannot dispose of HHW in their counties since their Solid Waste Management Districts no longer receive funding to provide this service.

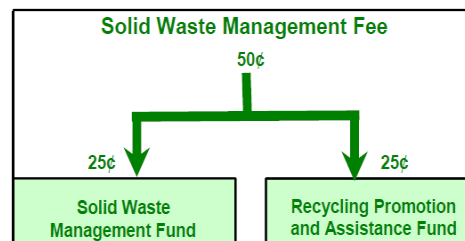
Conclusion

IDEM technical support and grants have provided important support for the growth of HHW programs and services in Indiana. HHW programs educate residents on safe storage and management of household chemicals which helps prevent accidental poisoning of children and household accidents. HHW programs provide a way for residents to safely dispose of used motor oil, gasoline, pesticides, and other hazardous products used in the home, making homes safer and reducing hazards for fire fighters. The hazardous and problem waste managed, collected and properly disposed, by HHW programs, is diverted from disposal in Indiana lakes, streams, storm drains, and ravines, reducing pollution and clean-up cost for Indiana communities. For more information on IDEM HHW reduction efforts, please visit www.recycle.in.gov.

Annual Recycling Report **IC 4-23-5.5-6**

The Recycling and Reporting Section within the Office of Program Support provides financial and technical assistance to develop recycling activities through two means: the Recycling Grant Program (IC 13-20-22-2) and the Recycling Market Development Program (RMDP) (IC 4-23-5.5-14). These programs work to reduce solid waste disposal and increase Indiana's recyclable material manufacturing capacity, as well as increase the use of recycled content products by working with local units of government, solid waste management districts, schools, not-for-profits, businesses, and recycling industries. Promoting the concept of collecting, using, and producing recycled materials in Indiana is a means of supporting the agency's initiatives of job creation and economic stability leading to environmental stewardship of natural resources.

Funding for the Programs comes from the Solid Waste Management Fee--a \$.50 per ton charge on final disposal of solid waste at a landfill or incinerator. Accordingly, the Solid Waste Management Fund receives \$.25, which supports the Recycling Grant Program. This Program has assisted communities by allocating funding for Public Recycling, Education and Promotion Grants, and, School Recycling Learning Grants.



The other half of the Solid Waste Management Fee is deposited in a separate fund: the Recycling Promotion Assistance Fund, which supports the Recycling Market Development Program. The RMDP offers grants to eligible Indiana businesses. Funding decisions for the RMDP projects are approved by the Recycling Market Development Board.

Eight Indiana companies received grant funding totaling \$1 million to expand recycling in Indiana in 2016. The companies' efforts totaled a combined \$2 million commitment to their operations, benefiting the environment and resulting in jobs creation. The companies and their grant award are listed below:

- **City of Shelbyville, Shelby County** – \$118,250 to initiate its first curbside recycling program;
- **East Terra Plastics LLC, Marion County** – \$250,000 to initiate a statewide agricultural plastics collection, processing and marketing project;
- **Indiana Recycling Coalition and Strategic Materials, Marion County** – \$22,585 to be used for equipment, management services and outreach materials to initiate a Central Indiana metro area glass recycling project;
- **Lake County Solid Waste Management District, Lake County** – \$179,150 to purchase equipment to start Indiana's first publicly-operated pre-consumer food waste composting program;
- **Monroeville Box, Pallet & Wood Products LLC, Allen County** – \$85,547 to purchase equipment that will allow the company to become a zero waste company.
- **Plastic Recycling 2, Marion County** – \$250,000 toward the purchase of an extruder and screen changer which will allow the company to begin recycling foam and rigid plastic food containers including cups, plates and more;
- **Rumpke, Jackson County** – \$87,425 to develop a recycling collection point at the Rumpke Medora Landfill, located in Medora, Indiana; and,
- **Secure Core Solutions, Marion County** – \$7,043 for the purchase of a baler to help capture recyclable materials that can be purchased by processors.

Total revenue received for the Solid Waste Management Fund for FY 2017, was \$701,376; and the total revenue for the Recycling Promotion and Assistance Fund for FY 2017 was \$1,547,777.

For more information about recycling in Indiana and recycling resources, please visit the *Recycle Indiana* website at: www.recycle.in.gov.

Pollution Prevention Report: IC 13-27-6

The Assistance and Outreach Branch of the Office of Program Support in the Indiana Department of Environmental Management (IDEM) is submitting this report to the Indiana General Assembly as required by Indiana Code 13-27-6. This report describes Indiana's Pollution Prevention (P2) activities and the measurable reduction results from 2016 efforts. The various P2 programs are summarized in the following categories: voluntary reduction programs, technical assistance, partnerships, reports, awards, grants, and education and training programs.

It is important to note that IDEM is continually seeking the most effective method for measuring the positive impact of pollution prevention activities. Currently IDEM uses surveys, annual reports from voluntary recognition program members, and final reports from grantees to measure pollution prevention progress and results. These tools do not capture all achievements resulting from pollution prevention efforts, but they are determined to be the best available tools for IDEM at this time.

Voluntary Recognition Programs

To encourage Indiana entities to pursue better environmental management practices, the P2 program offers recognition for participating in the Indiana Environmental Stewardship Program and Indiana CLEAN Community Challenge.

The Indiana Environmental Stewardship Program (ESP) is a performance-based recognition program for Indiana businesses. Each participating business has implemented an environmental management system, maintains a positive compliance record, and commits to at least one environmental improvement initiative each year. Participants are provided with regulatory benefits, reduced record keeping, advanced notice of routine inspections, and expedited permitting. In 2016, the fifty-five member facilities realized environmental achievements in the following areas:

- Water usage reductions by 42,230,345 gallons.
- Electricity usage reductions by 7,326,142 kilowatt hours
- Natural gas reductions of 59,112,153,698 Btu
- Air emissions reductions by 2,576,301 pounds of GHGs and 4,892 pounds of Volatile Organic Compounds (VOCs)
- Non-hazardous waste reductions by 5,250,881 pounds and 861,993 pound increase in recycling
- Hazardous Waste reductions by 9,277 pounds
- Material procurement of less toxic products reduced pollution by 269,893 pounds

Similar to ESP, the CLEAN Community Challenge is a technical assistance and recognition program for units of local government. CLEAN encourages communities to identify the environmental impacts from municipal operations and create a management plan focused on continual environmental improvement. Total membership as of December 2016 was fifteen municipalities. These members have committed to continuous environmental improvement by identifying the potential environmental impacts associated with municipal operations and implementing plans to proactively manage those impacts. Designated communities are required to submit an annual performance report which describes the progress made and hurdles overcome on their environmental projects for the year. To date, total environmental benefits reported for 2016 include:

- 555 trees planted and 700 given away to residents for planting
- Two communities received grants for their urban forest management
- 628,080 pounds of increased residential recycling
- Several communities have reduced energy costs by installing LED lighting, smart thermostats, and motion sensors. One community had results of energy reductions of 1100 Kwh and \$275 savings.
- Two cities have converted ornamental lighting in parks to LED reducing energy.
- Established one rain garden.

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- One community hosted an Active Living Workshop to identify transportation issues important to the community. They secured a pedestrian bridge over I-69 as part of the INDOT interchange improvement. They also received a grant to fund a complete bicycle and pedestrian master plan.
- Established an anti-litter campaign and collect 9,677 pounds of waste through community clean ups.
- Developed 8 miles of trails.

Partnerships

The Partners for Pollution Prevention, in cooperation with IDEM, held four meetings during 2016 for Indiana entities to share pollution prevention strategies. One of these meetings was the nineteenth Annual Pollution Prevention Conference and Trade Show. The day's agenda centered on the theme "P2 and Sustainability: Looking to the Future" and allowed speakers to share information on adopting pollution prevention into everyday business operations. In addition to these ongoing educational opportunities, the Partners' members annually report on the results of their pollution prevention initiatives.

The annual reporting deadline for 2016 for the Partners was June 1, 2017. Total environmental benefits reported by members for 2016 include:

Air Emissions Reductions (pounds/year)	Greenhouse Gases	177,000,000
	Volatile Organic Compounds (VOCs)	77,591
Solid Waste Reductions (pounds/year)		489,725
Water Usage Reductions (gallons/year)		17,328,306
Non-Hazardous Material Reductions (pounds/year)		1,056
Hazardous Material Reductions (pounds/year)		22,414
Hazardous Waste Reductions (pounds/year)		79,281,946
Electricity Usage Reductions (kwh)		40,933,716,931
Natural Gas Usage Reductions (Btu)		152,408,303,992
Recycling Increase (pounds/year)		135,115,224
Solar Generated (MW)		24 Direct current
		17 Alternating current

Governor's Awards for Environmental Excellence

The Indiana Governor's Awards for Environmental Excellence provide recognition to manufacturers, businesses, organizations, vendors, educators, and dedicated individuals for their outstanding environmental initiatives. These awards recognize Indiana's leaders who have implemented outstanding environmental strategies into their operations and decision-making processes. By seeking out and utilizing innovative environmental practices, facilities/programs reduce waste, save money, and contribute greatly to Indiana's environmental protection efforts, as well as benefit the health and welfare of Indiana's communities and the state as a whole.

The 2016 winner was Subaru of Indiana Automotive, Inc. In 2014, SIA worked with its parts delivery provider to convert a substantial amount of its fleet from diesel to compressed natural gas (CNG). Making this transition not only helped to greatly reduce fuel and maintenance costs, it also significantly reduced carbon dioxide (CO2) emissions from its logistics operations. Since making the conversion in August 2014, SIA reduced its CO2 emissions by over 74,000 tons.

Grants

Indiana's Clean Vessel Act (CVA) pump out grant program allows a public or private marina to receive a reimbursement of up to 75% for the purchase and installation of a pump out. Installing such a system at Indiana marinas will provide boaters with a proper method to dispose of their sewage and thus prevent it from entering Indiana's waters.

Indiana's Boating Infrastructure Grant Program (BIGP) provides grant funds for the construction, renovation, and maintenance of tie-up facilities with features for transient boaters, which are vessels 26 feet or more in length and stay less than 10 days. The grant allows for reimbursement of up to 75% for the purchase and installation of transient docks. These new facilities will allow boaters to come on shore to remove their sewage and enjoy the regional establishments.

No grants were awarded from these programs in 2016 due to changes in staffing.

Education and Training Programs

The Assistance and Outreach Branch provides pollution prevention education and training to Indiana schools and universities, the regulated industry, and general public.

47 IDEM staff visited 84 schools and reached over 9,978 Hoosier children during April 2016 for Earth Day presentations. A variety of topics were covered including recycling, nonpoint source water pollution, recycling, and landfill construction.

Conclusion

IDEM continues to make progress implementing the Indiana Industrial Pollution Prevention and Safe Materials Act. The Assistance and Outreach Branch focuses on continually improving the programs' effectiveness to reduce pollution and accurately measuring reduction results. At this time, IDEM does not see a need for additional legislation in this area. For additional information on the state of Indiana's P2 Programs please call (800) 988-7901.

Compliance Advisory Panel Report: IC 13-28-3
CTAP Activities July 1, 2016 - June 30, 2017

The federal Clean Air Act requires states to provide compliance assistance. IC 13-28-3 further defines Indiana's implementation of compliance assistance through the Compliance and Technical Assistance Program (CTAP) which has expanded assistance to all environmental programs: air, land and water.

CTAP activities are tracked and the following metrics help to measure program success and staff performance.

Internal program metrics for calendar year 2016 (results as of June 30, 2017):

	<i>2016 Goal</i>	<i>Completed</i>	<i>Percentage of Goal</i>
<i>Site Visits</i>	252	100*	40%
<i>Contacts with potential customers</i>	1,356	1,413	105%

*There was significant turnover in this program area in 2016; we had 6 new staff training during this timeframe.

Agency Metrics

<i>FY 2017 Goal: 250 site visits/year (average rolling total)</i>	<i>1st Quarter (7/1/16- 9/30/16)</i>	<i>2nd Quarter (10/1/16- 12/31/16)</i>	<i>3rd Quarter (1/1/17- 3/30/17)</i>	<i>4th Quarter (4/1/17- 6/30/17)</i>
<i>Average Rolling Total of CTAP Site visits</i>	159	137	115	103

Compliance and Technical Assistance Numbers for 2016:

- 754 total phone contacts

440 Air	57 Water
109 Land	148 Multi-Media/ Misc. Assistance

- Provided written assistance to 180 businesses
- Presented information at 21 events to 846 attendees

Additional Technical Assistance Provided:

- Provided assistance to the Environmental Stewardship Program and CLEAN community programs.
- Worked to update the Environmental Management 101 training for small to medium sized companies to become knowledgeable in the basics of environmental management. Prepared the Air Module to be presented in February 2017.
- Worked with IDEM and other state Small Business Environmental Assistance Programs (SBEAP) on several compliance and permitting initiatives.
- Provided CTAP Follow-up Letters to each company visited to clarify regulations and provide a document which can be used to demonstrate the customer is proactively pursuing compliance to IDEM inspectors.
- Continued to manage Small Business Regulatory Coordinator duties as described in IC 4-22-2-28.1 by providing Rule Summaries for Small Businesses.

Mercury Switches in End of Life Vehicles Activities: IC 13-20-17.7

This program was established to remove mercury switches from end of life vehicles processed in Indiana by motor vehicle recyclers.

IC 13-20-17.7-2 requires IDEM to prepare an annual report that includes the number of mercury switches collected from end of life vehicles and the amount of mercury collected.

Mercury Switches Activities January 1, 2015 to December 31, 2015

Total Number of Mercury Switches Collected from End of Life Vehicles	12,438 switches
Total Amount of Mercury Collected	27.36 pounds

Mercury Switches Activities January 1, 2016 to December 31, 2016

Total Number of Mercury Switches Collected from End of Life Vehicles	7,875 switches
Total Amount of Mercury Collected	17.33 pounds

E-Waste Report **IC 13-20.5-7-4**

The Indiana electronic waste (e-waste) law (IC 13-20.5) created an extended producer responsibility (EPR) program, known as Indiana E-Cycle, under which manufacturers of video display devices (VDDs) are required to collect and recycle e-waste from covered entities (households, small businesses, and public schools) in Indiana. IDEM manages the program.

The law requires that manufacturers of VDDs that offer their products for sale to Indiana households annually register with and report to IDEM. Each year these manufacturers are required to collect and recycle 60 percent by weight of the total weight of VDDs they sold to Indiana households during the previous twelve months. They can collect and recycle a broader range of products of any brand, known as covered electronic devices (CEDs), to fulfill their obligation. The law also contains a disposal prohibition which, as of January 1, 2011, prohibits covered entities from disposing of CEDs with trash that is intended for disposal at a landfill or by burning or incineration.

This year, 2017, marks the eighth year of the Indiana E-Cycle Program. This report will examine the last seven years of the program as well as provide the required annual information mandated by the Indiana legislature. For example, highlighting Program Year 7 (PY7), manufacturers collectively funded the recycling of 15,818,470 pounds of covered electronic devices, again exceeding their recycling obligation the vast majority of the weight recycled as part of the program continues to be collected from metropolitan counties in the state.

Legislative Requirements

Under IC 13-20.5-7-4, IDEM is to submit a report concerning the implementation of the Indiana e-waste law to the general assembly, the governor, the Interim Study Committee on Environmental Affairs, and the Indiana Recycling Market Development Board before August 1.

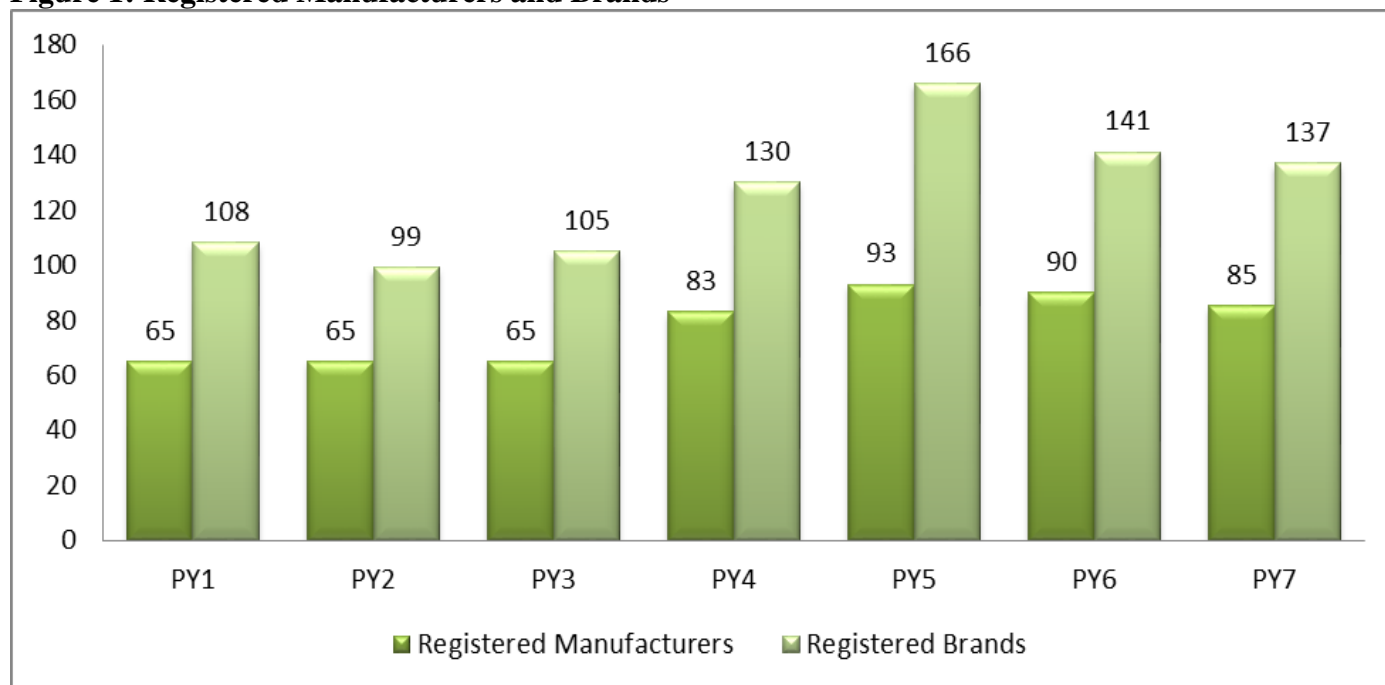
Required content includes:

- A summary of information in the annual reports submitted by manufacturers and recyclers.
- Information regarding the total weight of CEDs recycled.
- The various collection programs used by manufacturers to collect CEDs.
- Information regarding CEDs that are being collected by persons other than registered manufacturers, collectors, and recyclers.
- Information about CEDs, if any, being disposed of in landfills in Indiana.
- A description of enforcement actions under the Indiana e-waste law.

Program Participation

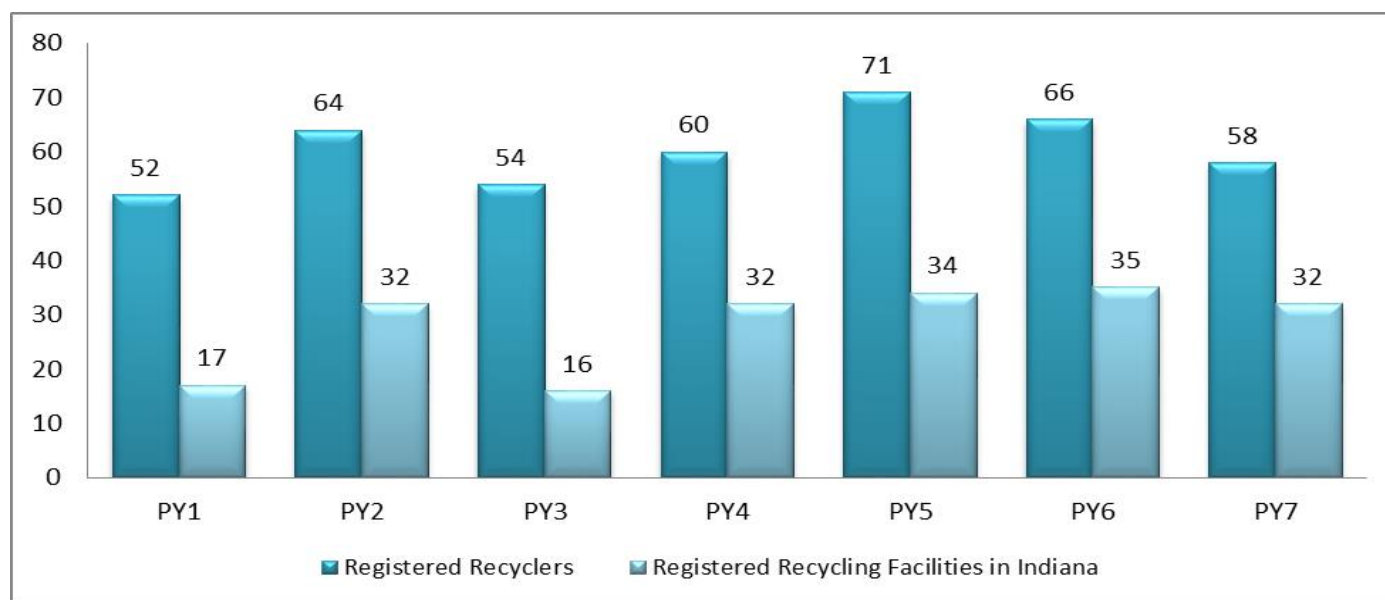
While the number of registered manufacturers and brands remained relatively unchanged from the previous program year, the companies that are registered has varied as new manufacturers enter the market, other manufacturers exit the market, and mergers and acquisitions occur. A total of 85 manufacturers registered with the Indiana E-Cycle Program for PY7. These 85 manufacturers accounted for 137 different brands of devices that are being sold to Indiana households.

Figure 1: Registered Manufacturers and Brands



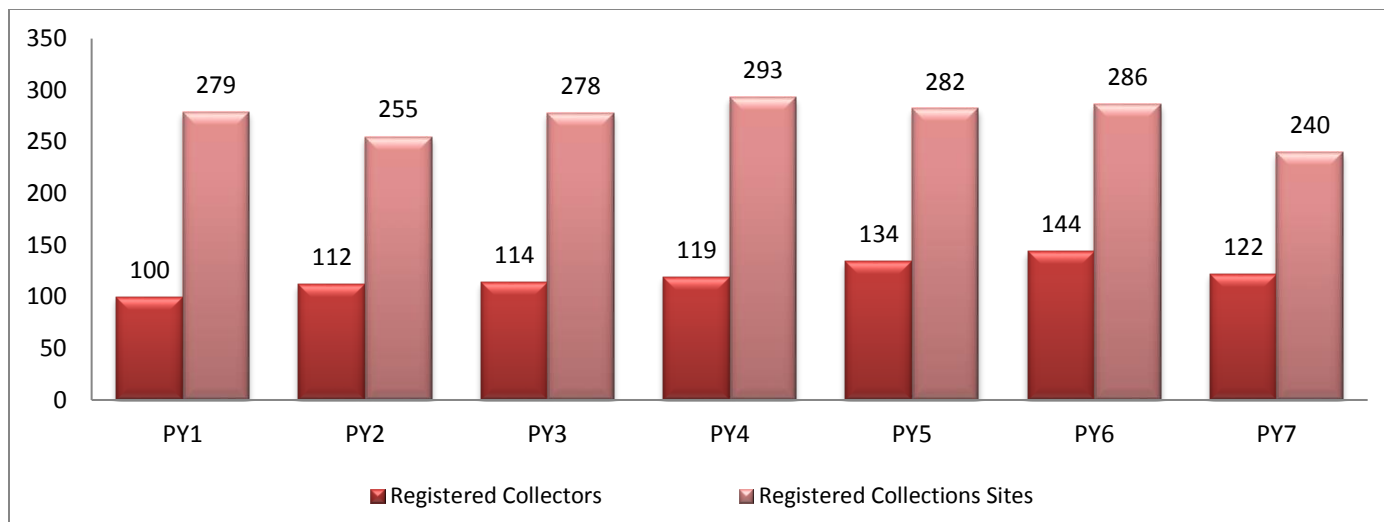
For each of the first seven program years, the majority of registered recyclers have also been registered collectors. The number of registered recyclers for PY7 decreased slightly from the previous program year. The primary explanation for this decrease can be explained by better quality assurance checks within the program, especially when determining if it is necessary that a recycler register with the program. For PY7, of the 58 registered recyclers, 32 of them are located in Indiana.

Figure 2: Registered Recyclers and Registered Recycling Facilities in Indiana



As shown in **Figure 3**, the number of registered collectors and collection sites decreased from the previous program year. Collectors are not allowed to perform any dismantling of CEDs. Dismantling of CEDs requires registration as a recycler. Most registered recyclers are also registered as collectors; however, most collectors are not also recyclers.

Figure 3: Registered Collectors and Collection Sites



Summary of Information in the Annual Reports Submitted by Manufacturers and Recyclers (Including Total Weight of CEDs Recycled)

The statute allows a 50 percent incentive to be earned for collecting CEDs from non-metropolitan counties in the state and a 10 percent incentive for recycling CEDs at a registered facility in Indiana. These incentives can be combined; for example, each pound of CED collected from a non-metropolitan county and recycled at an in-state recycling facility is counted as 1.6 pounds recycled. **Figures 4 and 5** show how many pounds of CEDs were recycled by manufacturers registered in PY7 and the previous program years in which annual reports were submitted.

Figure 4: Covered Electronic Devices Recycled by Registered Manufacturers (lbs.)

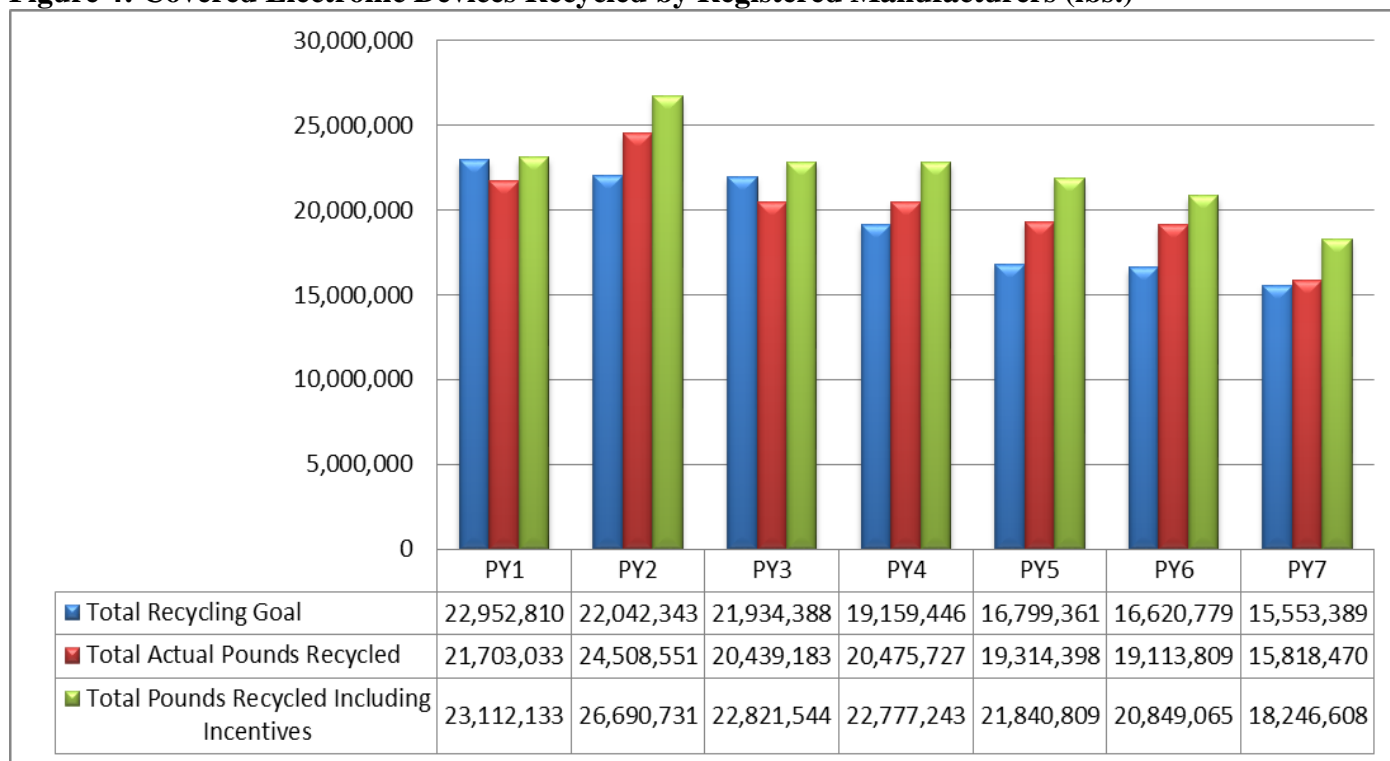
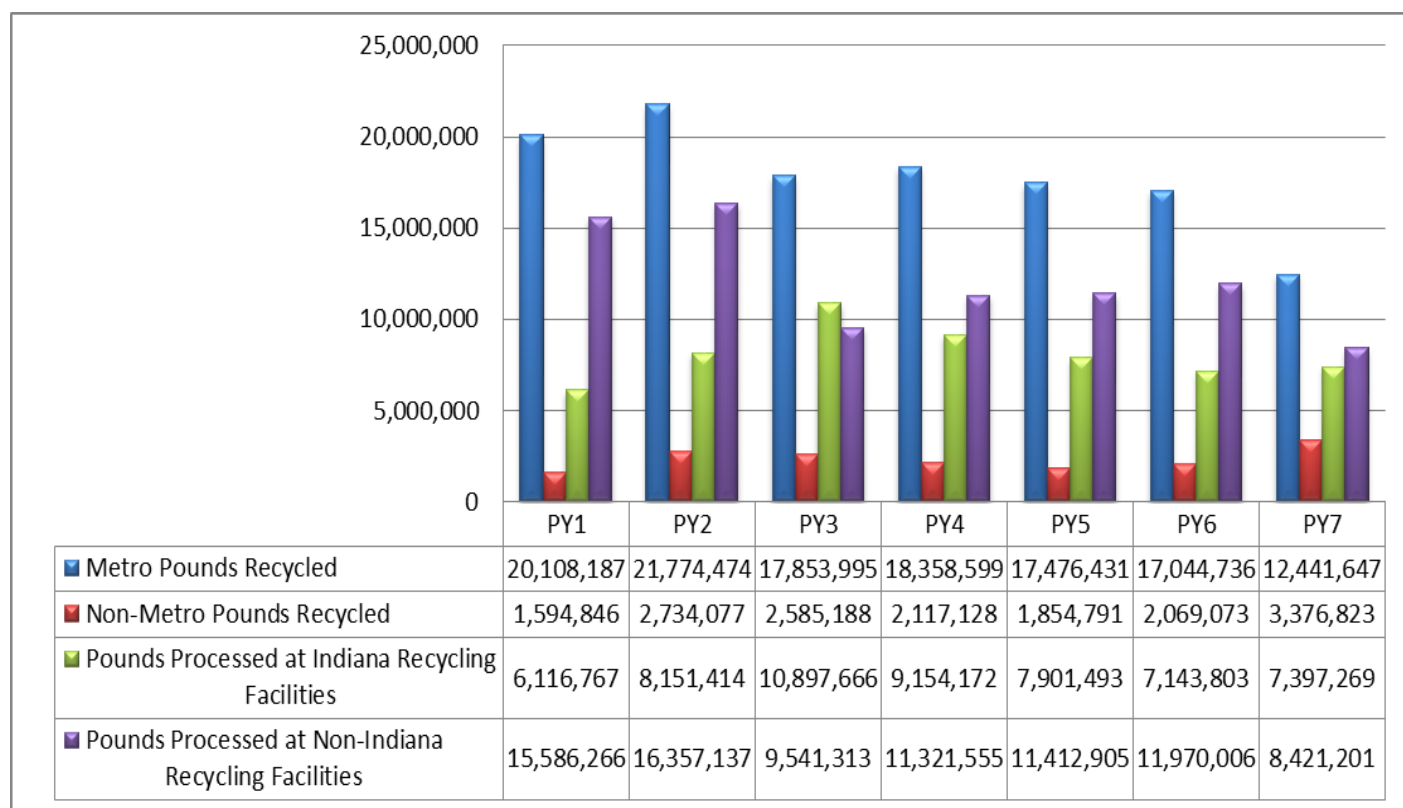


Figure 5: Covered Electronic Devices Recycled by Registered Manufacturers: Details (lbs)



Figures 6 and 7 show how many pounds of CEDs were recycled by recyclers registered in PY7 and the previous program years. There continues to be more e-waste being recycled than what registered manufacturers are responsible for recycling.

Figure 6: Covered Electronic Devices Recycled by Registered Recyclers (lbs)

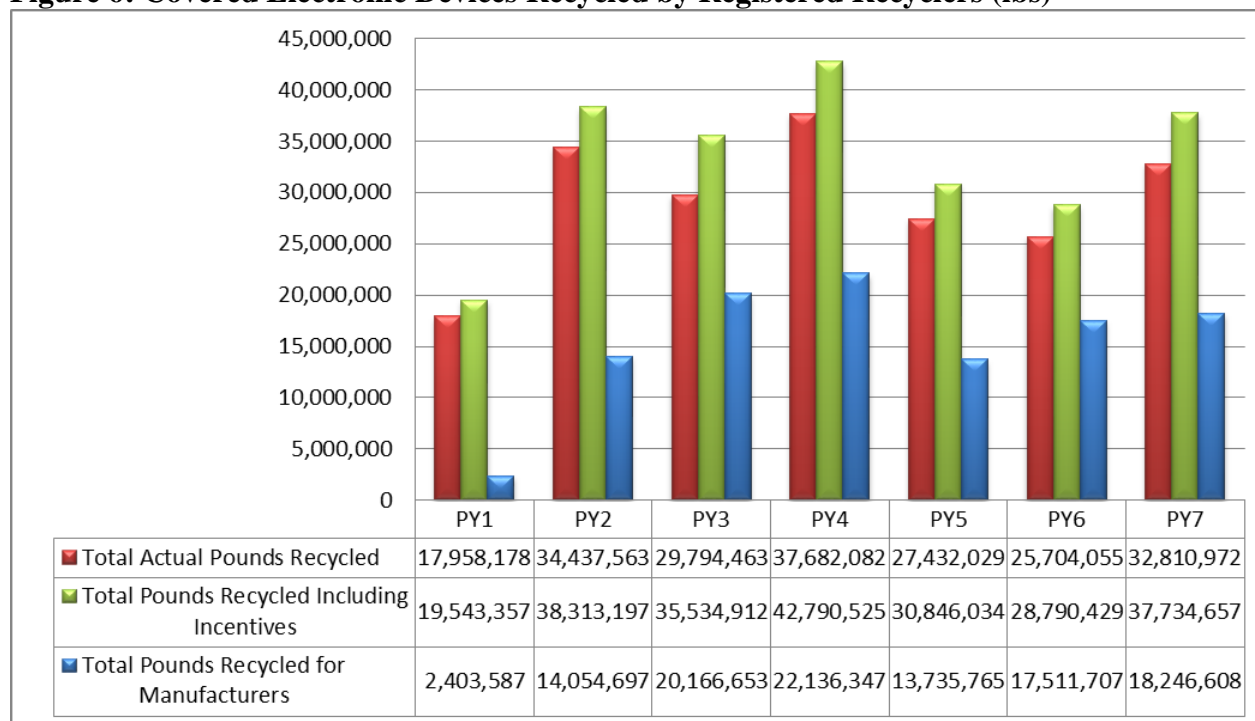
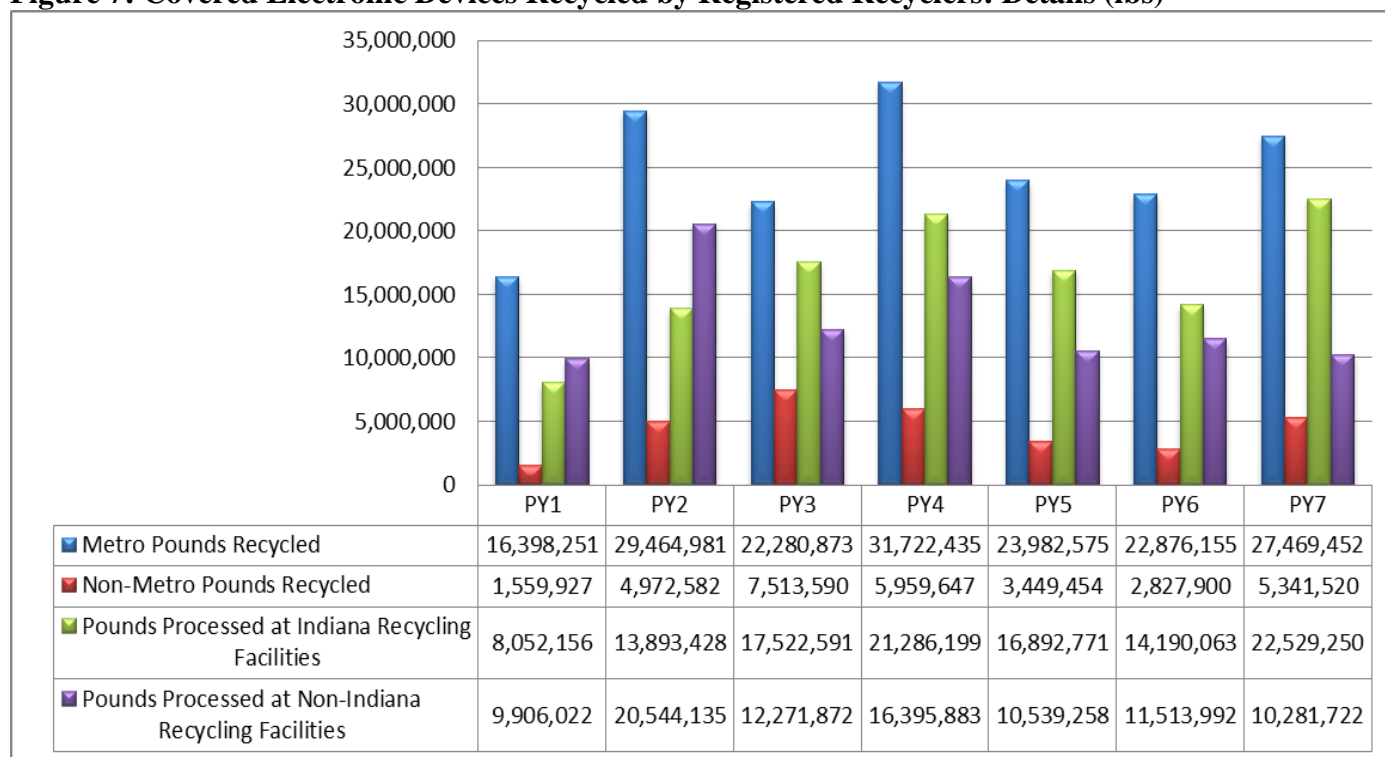


Figure 7: Covered Electronic Devices Recycled by Registered Recyclers: Details (lbs)



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Based on the reporting trends, the amount of CEDs recycled in Indiana will continue to exceed the amount of CEDs that manufacturers are responsible for recycling given that new VDDs are becoming lighter than older CEDs. In addition, the list of items that meet the definition of CED is more extensive than the list of items that are defined as VDDs. Lastly, manufacturers' recycling obligations are based solely on their sales of VDDs to households, while CEDs collected to meet their recycling obligations can come from households, small businesses, and public schools.

The results of Indiana E-Cycle in terms of pounds of e-waste recycled per resident are as follows:

	PY 1	PY 2	PY 3	PY 4	PY 5	PY 6	PY7
Lbs./Capita (Actual Pounds)	3.35	3.78	3.13	3.12	2.93	2.89	2.38
Lbs./Capita (Including Incentives)	3.56	4.12	3.49	3.47	3.31	3.15	2.75

If a manufacturer exceeds their recycling obligation, 25 percent of the excess pounds are converted to recycling credits that can be used by the manufacturer in any of the three immediately following program years or sold to another manufacturer. Manufacturer credit details are as follows:

	<u>Credits Earned</u>	<u>Credits Bought/ Sold</u>	<u>Credits Used</u>	<u>Credits Expired</u>	<u>Credits Retained</u>	<u>Manufacturers Holding Credits</u>
PY1	1,074,733	0	n/a	n/a	1,074,733	18
PY2	1,623,705	0	19,253	n/a	2,653,837	23
PY3	555,630	0	116,758	n/a	3,090,762	26
PY4	967,292	87,256	104,592	809,875	3,039,188	37
PY5	1,174,168	246,957	808,867	586,136	2,579,219	29
PY6	1,057,072	0	128,070	465,811	3,024,254	25
PY7	673,305	179,919	65,531	698,386	3,170,225	24

Various Collection Programs Used by Manufacturers to Collect CEDs

Manufacturers registered with Indiana E-Cycle utilize three types of collection programs to fulfill their recycling obligations:

1. Permanent collection sites
2. Temporary/special collection events
3. Manufacturer take-back programs

Multistate Collaboration

The Indiana E-Cycle Law permits IDEM to participate in and join regional multistate organizations or compacts to assist in implementing the article. IDEM participates in regular conference calls with other Midwestern states, which are coordinated by the United States Environmental Protection Agency Region 5 office. The majority of the states that participate in the calls also have e-waste laws, most notably, Minnesota and Wisconsin, which have laws comparable to Indiana's. The information shared and the coordination achieved on these calls is valuable in assisting with the implementation of Indiana's law.

Description of Enforcement Actions Under the Indiana E-Waste Law

Manufacturers that do not meet their recycling obligation are subject to a shortfall fee, or a variable recycling fee (VRF).

The VRF is calculated as follows:

- Forty cents per pound of shortfall for manufacturers that recycle less than 50 percent of their goal.
- Thirty cents per pound of shortfall for manufacturers that recycle at least 50 percent, but less than 90 percent, of their goal.
- Twenty cents per pound of shortfall for manufacturers that recycle at least 90 percent of their goal.

Eight manufacturers were required to pay a shortfall fee for PY6, resulting in \$4,722.60 for a total shortfall of 11,855 pounds. For PY7, three manufacturers will be required to pay a shortfall fee for a total amount of \$1,439.80.

Manufacturers that were exempt from the registration fee for PY7, because they sold less than 100 units of video display devices to households during PY6, are exempt from the VRF.

Conclusion

Indiana's E-Cycle Program has achieved numerous successes since it took effect in 2009, most notably helping to allow for over 205 million pounds of CEDs to be recycled. Indiana has also had the benefit of having a large number of collectors register with the program, which allows Indiana residents the ability to have numerous options in regards to recycling their electronic devices.

IDEM is determined to provide accurate data regarding the collection and recycling of electronics. Recent modifications and a streamlined approach, coupled with an online reporting format, has assisted IDEM with achieving this goal. As the program continues to grow and develop, a more refined understanding of the regulated community will arise, as well as the continued practice and development of efficient data collection.

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